

Application No. 09/723,722
 Amendment dated March 18, 2005
 Reply to Office Action of December 23, 2004

Appendix: Claim Support Table

Claim	Location of support in 60/139,172, filed June 15, 1999 (6420US)
<p>1. (Currently Amended) A protein purified to apparent homogeneity comprising a segment of a β-secretase enzyme protein comprising</p> <p><u>residues 63-452 of SEQ ID NO:2, the segment comprising valine at a position corresponding to position 130 of SEQ ID NO:2,</u></p> <p>wherein the protein lacks a signal sequence (amino acid residues 1-21 of SEQ ID NO:2) and the putative pro region (amino acid residues 22-45 <u>1-45</u> of SEQ ID NO:2)</p> <p><u>wherein the protein exhibits β-secretase activity.</u></p>	Page 36, lines 10-14
	Page 30, lines 1-6
	Page 31, lines 3-6
	Page 21, lines 4-8
<p>15. (Currently Amended) The protein of claim 1, wherein said <u>amino acid sequence of the</u> protein consists of a polypeptide having the amino acid sequence SEQ ID NO: 43.</p>	Page 10, lines 11-16

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Claim	Location of support in 60/139,172, filed June 15, 1999 (6420US)
<p>18. (Currently Amended) The protein of claim 1, wherein said protein has an N-terminal residue corresponding to a residue selected from the group consisting of residues 46, 58 and 63 <u>of SEQ ID NO: 2</u> with respect to SEQ ID NO: 2 and a C-terminus selected from a residue between positions 452 and 501 <u>of SEQ ID NO: 2</u> with respect to SEQ ID NO: 2.</p>	<p>Page 29, line 24 to page 30, line 6</p>
<p>22. (Previously Presented) The protein of claim 1, wherein said protein is produced by a heterologous cell.</p>	<p>Page 13, lines 29-30, page 14, lines 1-4, and page 36, lines 25-26</p>
<p>23. (Previously Presented) A crystalline protein composition formed from the protein of claim 1.</p>	<p>Page 31, lines 3-12</p>
<p>24. (Previously Presented) The crystalline protein composition of claim 23,</p> <p>wherein said purified protein is characterized by a binding affinity for the β-secretase inhibitor substrate P10-P4'sta D\rightarrowV which is at least 1/100 of an affinity exhibited by a protein</p> <p>having the amino acid sequence SEQ ID NO: 43, when said proteins are tested for binding to said substrate under the same conditions.</p>	<p>Page 31, lines 3-12</p>
	<p>Page 31, lines 13-29</p>
	<p>Page 29, lines 24-26</p>

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<p>25. (Previously Presented) The crystalline protein composition of claim 23,</p> <p>wherein said composition is formed from a protein having a sequence selected from the group consisting of SEQ ID NO: 43,</p> <p>and SEQ ID NO: 71.</p>	Page 31, lines 3-12
	Page 29, lines 24-26
	Page 31, lines 23-27
29. (Original) The crystalline protein composition of claim 23, wherein said protein is glycosylated.	Page 32, lines 7-13
30. (Original) The crystalline protein composition of claim 23, wherein said protein is deglycosylated.	Page 32, lines 7-13
31. (Original) The crystalline protein composition of claim 23, wherein said composition further includes a β -secretase substrate or inhibitor molecule.	Page 33, lines 21-23 and page 35, lines 15-25
33. (Original) The crystalline protein composition of claim 31, wherein said β -secretase inhibitor has consists of the sequence SEQ ID NO: 72 [P10-P4'sta D→V], including conservative substitutions thereof.	Page 35, lines 26-28

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34. (Original) The crystalline protein composition of claim 31, wherein said β -secretase inhibitor <u>has consists of the sequence</u> SEQ ID NO: 81 [EVMXVAEF], wherein X is hydroxyethylene or statine.	Claim 19 as filed
	Claim 17 as filed
36. (Original) The crystalline protein composition of claim 31, wherein said β -secretase inhibitor is characterized by a K_i of no more than about 50 μ M.	Claim 21 as filed
132. (Previously Presented) The protein of claim 1, wherein the protein has been purified sufficiently to run as a single band on a SDS PAGE gel under reducing conditions.	Page 23, lines 5-7
133. (Previously Presented) The protein of claim 1, wherein the protein has been purified sufficiently to provide a suitable substrate for N-terminal amino acid determination.	Page 24, lines 2-5
134. (New) The protein of claim 1, wherein the protein comprises SEQ ID NO: 58.	Claim 24 as filed & page 8, line 11